MODEL L—H009 MULTI—PURPOSE MACHINE

OPERATION INSTRUCTION

TEST CERTIFICATION

PACKING LIST

SERIES:

LINYI MACHINE TOOL WORKS

THE PEOPLE'S REPUBLIC OF CHINA

CONTENTS

1. Purpose and Application Scope

This machine is a multi purpose bench-type machine, which is capable of turning, drilling, milling, boring and thread-cutting, and suitable for processing metal and other materials in small scale enterprises and repairing shops. It also can be used in schools, hospitals, research institutes and families for manufacturing teaching aids, experimental devices and handicraft, etc.

According to the design requirements, the processing diameters of steel and cast-iron workpieces are not more than 40mm for turning, 63mm for milling, and 16mm for drilling.

A special order should be given for processing inch thread workpieces.

2. Main Structure and Feature

This machine consists of bed, headstock, drilling-milling box, bench, apron, feed box, tailstock and motors. It integrate the main functions of turning, drilling and milling. Its bench can feed mechanically in both longitudinal and transverse directions. It's characterised by compact structure, easy operation and multi-purpose in one.

3. Main Technical Data

TURNING

Max swing dia. of workpiece in gap-bed	360mm
Max diameter of turning (middle carbon steels)	40mm
Max. distance between centers	300mm
Max. longitudinal strock	210mm
Max. transverse strock	180mm
Morse taper of spindle hole	No.3
Bore diameter of spindle	20mm
Morse taper of tailstock hole	No.2
Spindle speeds	200, 310, 400, 420, 560, 600, 1150, 1250, 1800r/min
Motor	550w
Range of feeds Metric thread	1～3mm
Inch thread	7～24T/Inch
Longitudinal feed (Metric)	0.066～0.226mm/r
Transverse feed (Metric)	0.037～0.127mm/r
Longitudinal feed (Inch)	0.08～0.264mm/r
Transverse feed (Inch)	0.045～0.15mm/r

DRILLING AND MILLING

Turn-round of drilling-milling box	±90°

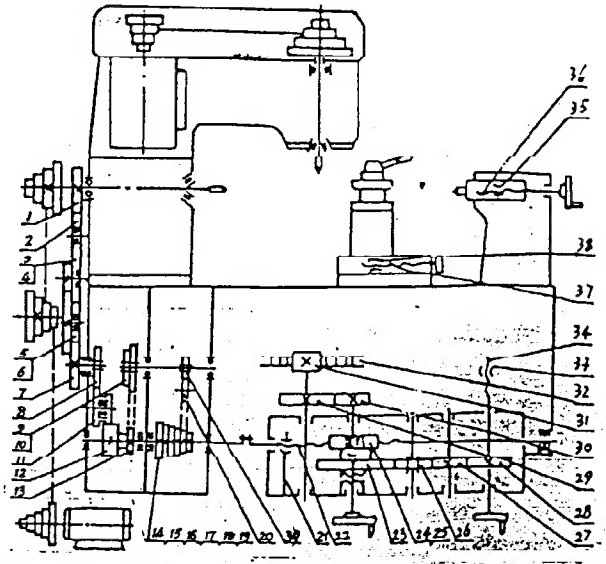
Max.drilling diameter		16mm
Morse taper of milling spindle hole		No.2
Max. diameter of end mill		12mm
Max. diameter of facer		63mm
Area of bench (L×w)		200mm×185mm
spindle speeds	430,800,1050,1500,2000r/min	220v/380v
	430, 800, 1050, 1500r/min	(110v)
Motor		250w - 370w
Overall dimention(L×w×h)		920mm×720mm×810mm
Net weight		180kg

4.Transmission System of Machine

From Diag. 1 can you see as following:

The driving force for turning is transfered from the motor behind the bed to the turning spindle via a two-stage V-belt unit.Nine-stage speeds can be obtained by adjusting the belts according to the speed plate. The driving force for drilling and milling,from the motor in the drilling-milling box to the drilling-milling spindle via a one-stage belt unit. The power of the feeding system, from the turning spindle to the feed box via a gear change,and from the primary group unitand the expanding group unit to the apron, so the longitudinal and transverse turning feeds or thread-cutting is realized.

The driving parts in the transmission system is shown in Table1 and2.



Diag.1 Transmission System Diagram

Table 1 List of Gears

No.	No of Machine Copg	Tooth Number	Material	No	No of Machine Copg	Tooth Number	Material
1	227	60		16	769	20	45
2	220	60	HT150	17	769	18	45
3	213	60		18	769	16	45
4	216	48	HT150	19	769	14	45
5	721	33	HT150	20	776	17	45
6	720	56		23	607	65	HT150
7	731	49		24	606	60	HT150
8	710	27	45	26	655	18	45
9	708	27	45	27	655	18	45
10	706	36	45	28	430	18	45
11	787	18	45	29	647	65	HT150
12	753	27	45	30	648	17	45
13	755	18	45	31	648	17	45
14	769	24	45	39	781	22	45
15	769	22	45				

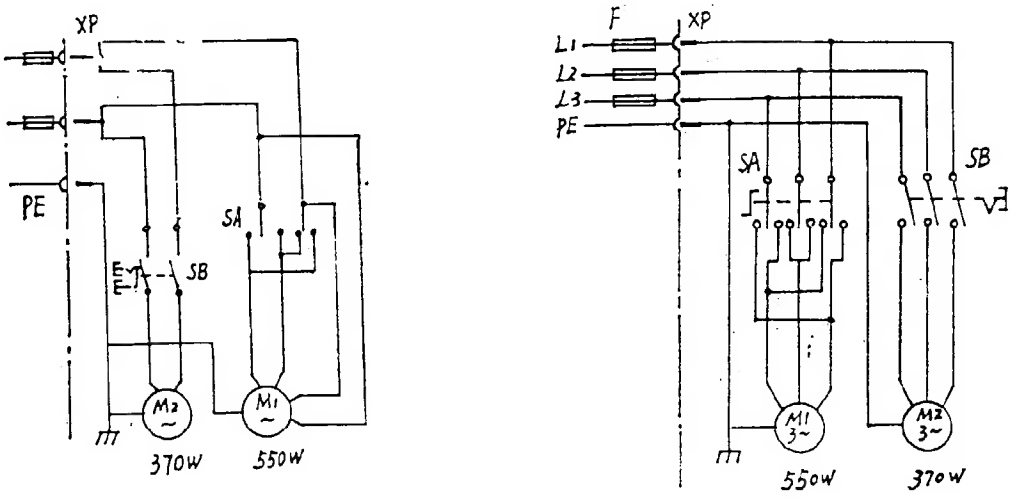
Note: Mode of the gears above is one piont five, the shift coef. of them is zero. Material which is not given is phenotic laminated fabric plate.

Table2 List of the Other Driving Parts

No.	Name	Hand of Spiral	Material	Heat Treatment	No.	Name	Hand of Spiral	Material	Heat Treatment
21	Screw nut	Left	ZQSn 6-6-3		34	Screw	Left	45	T235
22	Screw		45	T235	35	Screw nut		HT150	
		Right			36	Screw		45	
25	Worm			T235	37	Screw		45	
32	Rack		45		38	Screw nut		HT150	
33	Serew nut		HT150						

5.Electric System of Machine

This machine is driven by two sets of motor (220v/380v,50Hz,or 110v,60Hz, 1400r/min) each power of which is 370w and 550w.The motion of the turning motor is controlled by a combination switchSA loca ted on the headstock and the motion of the drilling-milling motor,by a button switch SB located on the drilling -milling box. This electric system is safe and easy to operate.



Diag.2 Electric principle Diagram

6.Lubication System of Machine

All moving fraction surfaces of the machine tool parts should be lubricated periodically and thoroughly in order to assure its working relibility and reduce loss of power and wear of parts.

Therefore,the following points must be paid attention to:

(1) All of the oil sites should be oiled manually according to Diag.3.

(2) Rails,surfaces of the spindle bore,lead screws and driving parts in feed box and apron should be lubricated according to their working conditions.

(3) This machine should be lubricated with engine oil 30°,whose oilbody is 3.81°～4.59°E50.

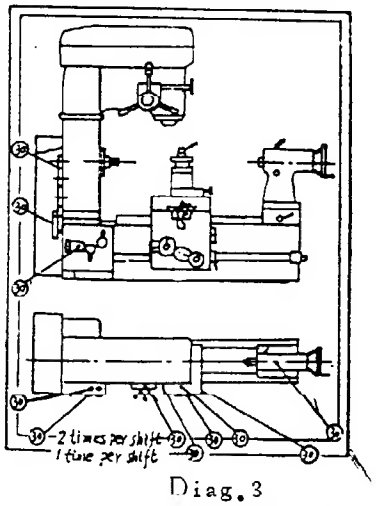
(4) All of the rolling bearings should be washed clean once per year and oiled.

7. Installation, Operation and adjustment

This machine has been inspected and tested before delivery. It must be installed properly, otherwise its accuracy and durability will be affected. Please pay more attention to this. Place the machine on a flat and strong platform, fix four elampiag screws on the platform according to the positions of the clamping holes on bed. Conforming to the Go item in the certificat, test the machine with a level to make sure that it is level. Place metal planes with appropriate thickness near the clamping screws under the bed. Precisely adjust this machine, keep it in horizontal stage and tighten the screws diagonally, untill it conforms to the requirement. The foot screws should be locked evenly in order to keep the machine level.

After being switched on, the machine should be run without load. It can be operated until after this kind of check with good result

Before running you should familiarise yourself with the position and the working method of every operating parts according to Diag. 4 and table3 and oil it according to Diag 3. Check the electric compounds to see whether they are complete or not, as well as whether the motors are damped, then connect electricity to test run, pay attention to the running condition of every mechanism and whether the rotating direction of the motors are right or not.



Diag. 3

Diagram of Maching Lubricating

Adjustment of the turning spindle and drilling-milling spindle:

Loose the lock-screw on the round nut which is at the end of spindle, adjust the round nut to assure the spindle turning freely, then relock the lock screw.

The overload clutch achives its action by pressing a steel ball with a Preload -ed screw through a spring. Adjusting the preloaded screw can change the drive torgue, but it can not be turn to end.

8. Control and Operation

Pay attention to the following when operating:

(1) When the jaws of the tool post are used to clamp workpiece, remove the square turret assembly (including item # T06, T10, etc.), turn the tool post handwheel(item # T39)and use the handle lever (item # T38,included in the accessories assembly) to hold the workpiece firmly.

(2)Before starting up,check whether the position of every handle is correct or not.

(3)When unloading workpieces,or going away from the machine tool,you must turn the motors off.

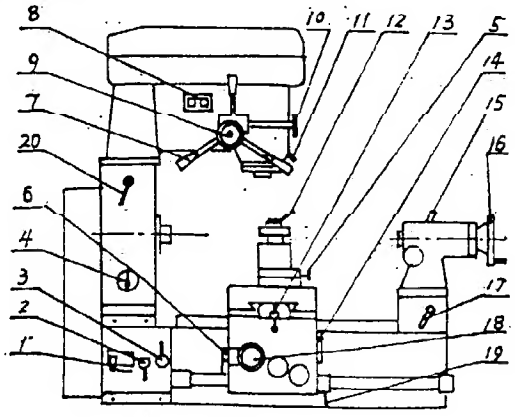
(4)The handles on the feed box can be turned only when the motor stops.

(5)The handles on the apron can be turned only when the motor stops or is at a lower speed.

The control methods are shown as following (shown in Diag.4):

(1)Control of the drilling or milling feed.Micro-stroke feed can be realized when clutch handle 9 is pushed in and fine -adjusting hand wheel 10 is terned. When handle 9 is pulled out,handle 7 is then turned,a large-stroke feed can be controlled by hand.

(2)Control of metric feed. Liftingup or putting downhandle 6 can reailize longitudinal mechanic or manual feed. Lifting up or putting down handle14can



Diag. 4

Diagram of Machine Controlling

realize transverse feed mechanic or manual. (3) Control of cutting thread. Selecting the position of handle 1,2 as needed, putting down handle 6 and 14,and liftingup handle 19,can realize thread-cutting. .The interlock mechanism can ensure that mechanic feed and thread-feed can't occur at the same time.

(4) When cutting thread, following sholud be paid attention to:

a: The turning spindle should turn at the lower speed 200r/min. b: When the cut space of a workpiece is wide, you may take the reverse method, that is, keep handle 19 at the engaged condition, not turn the switch 4 to the opposite position until the motor stops.

Tadle 3 Table of Control Parts

No.	Name	No	Name
1	Primary group speed-handle	11	Spindle quill lock handle
2	Expanding group speed-handle	12	Tool post lock handle
3	Handle for foword or reverse	13	Transverse handwheel
4	Turning motor switch	14	Transverse clutch handle
5	Tool post handwheel	15	Tailstock quill lock handle
6	Longitudinal feed handle	16	Tailstock handwheel
7	Handle	17	Tailstock lock handle
8	Drilling-milling motor switch	18	Longitudinal feed handwheel
9	Drilling-milling clutch handle	19	Nut clutch handle
10	Fine-feed handwheel	20	Drilling-milling box lock handle

9.Maintenance of Machine

(1) It's not allowed to exceed max. processing range mentioned above as the specification is chosen.

(2) This machine should be oiled according to lubrication requirements.

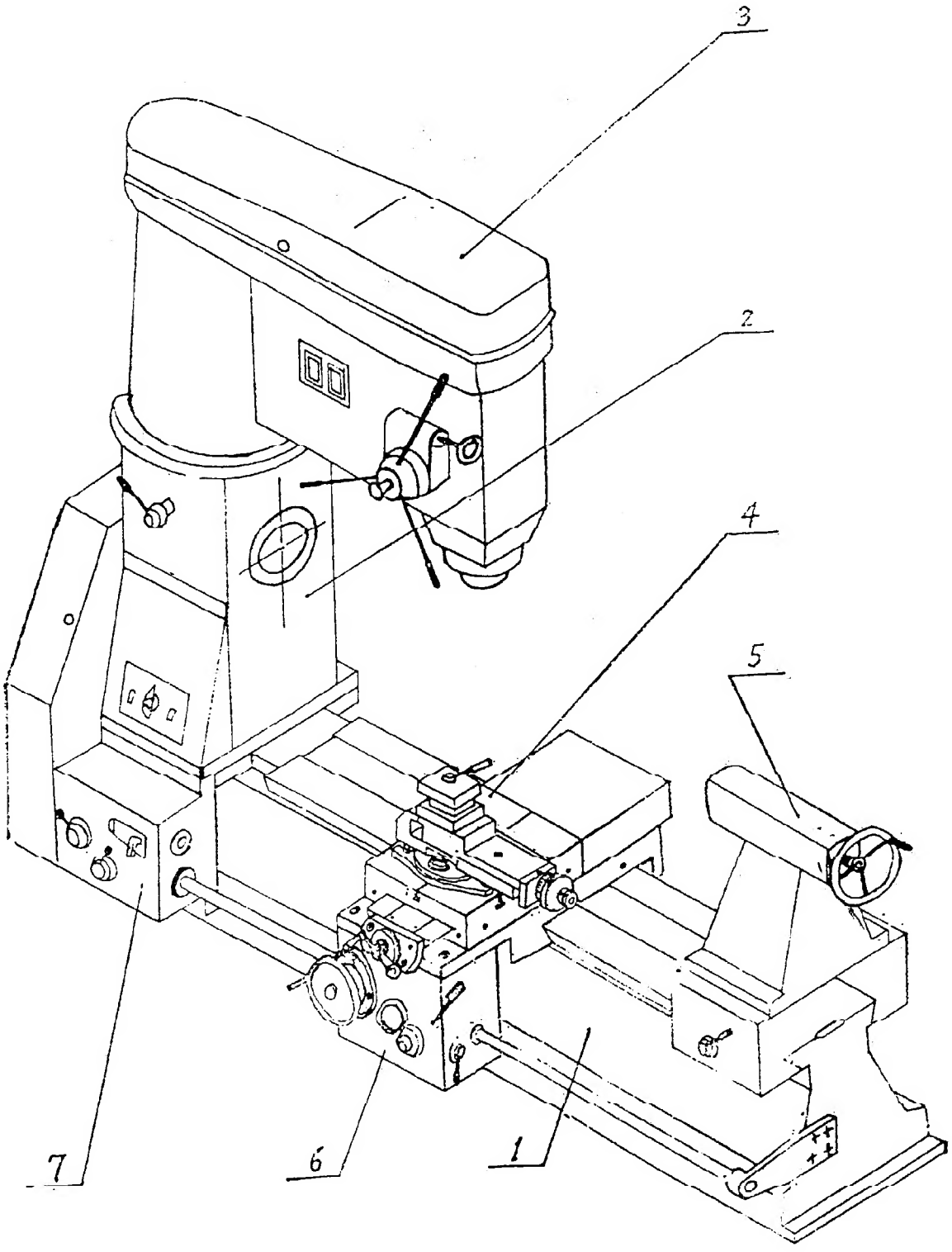
(3) If the machine at run has any trouble or abnormal noise,it should be stoped checked and repaired.

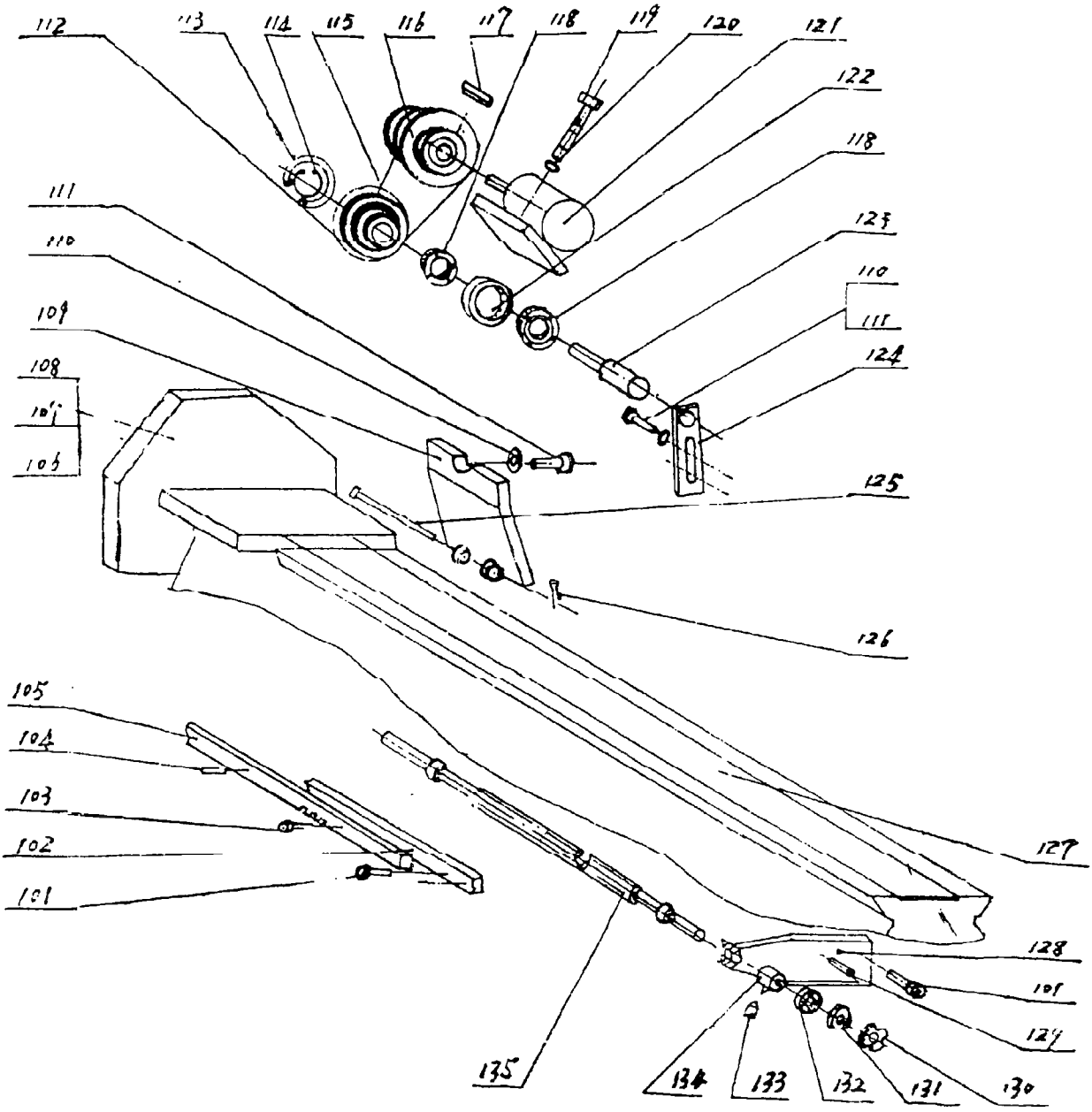
(4) Checking periodically and adjusting the tension of v-belts.

(5) Before each work shift, checking carefully whether every control part is in correct position or not.

(6) All outer-shown fraction surfaces should be checked whether they are efficiently lubricated.

10. Machine Copy

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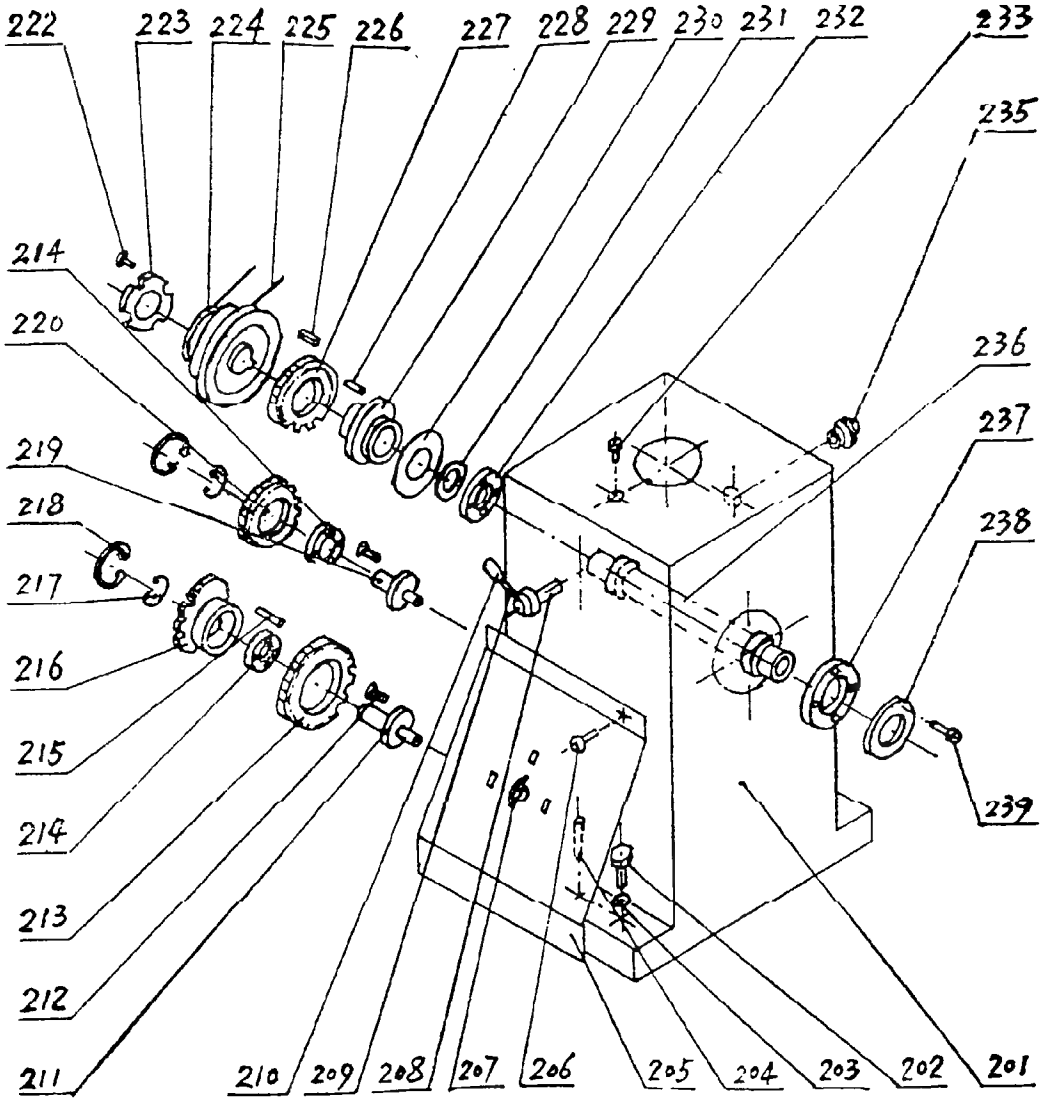
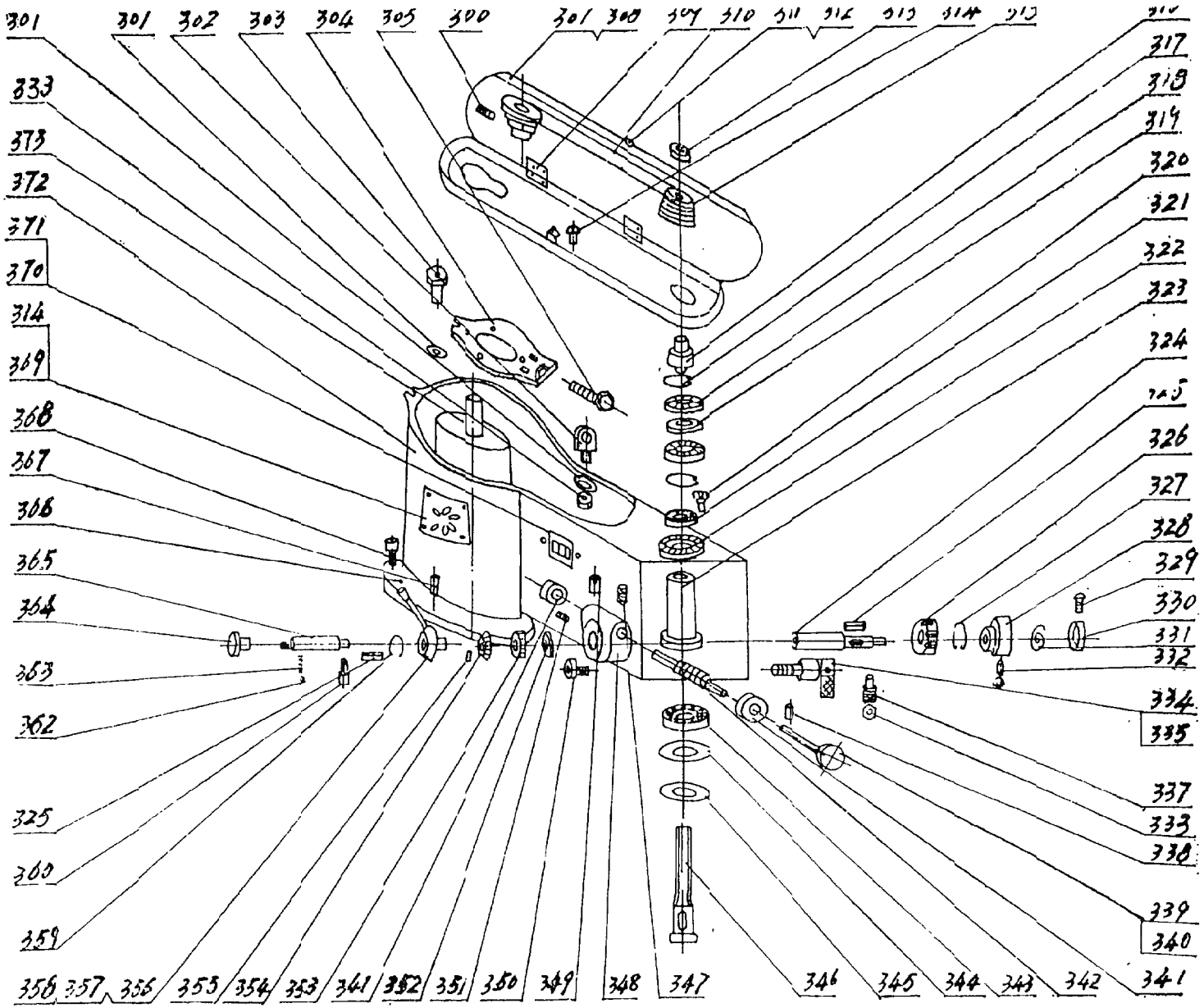
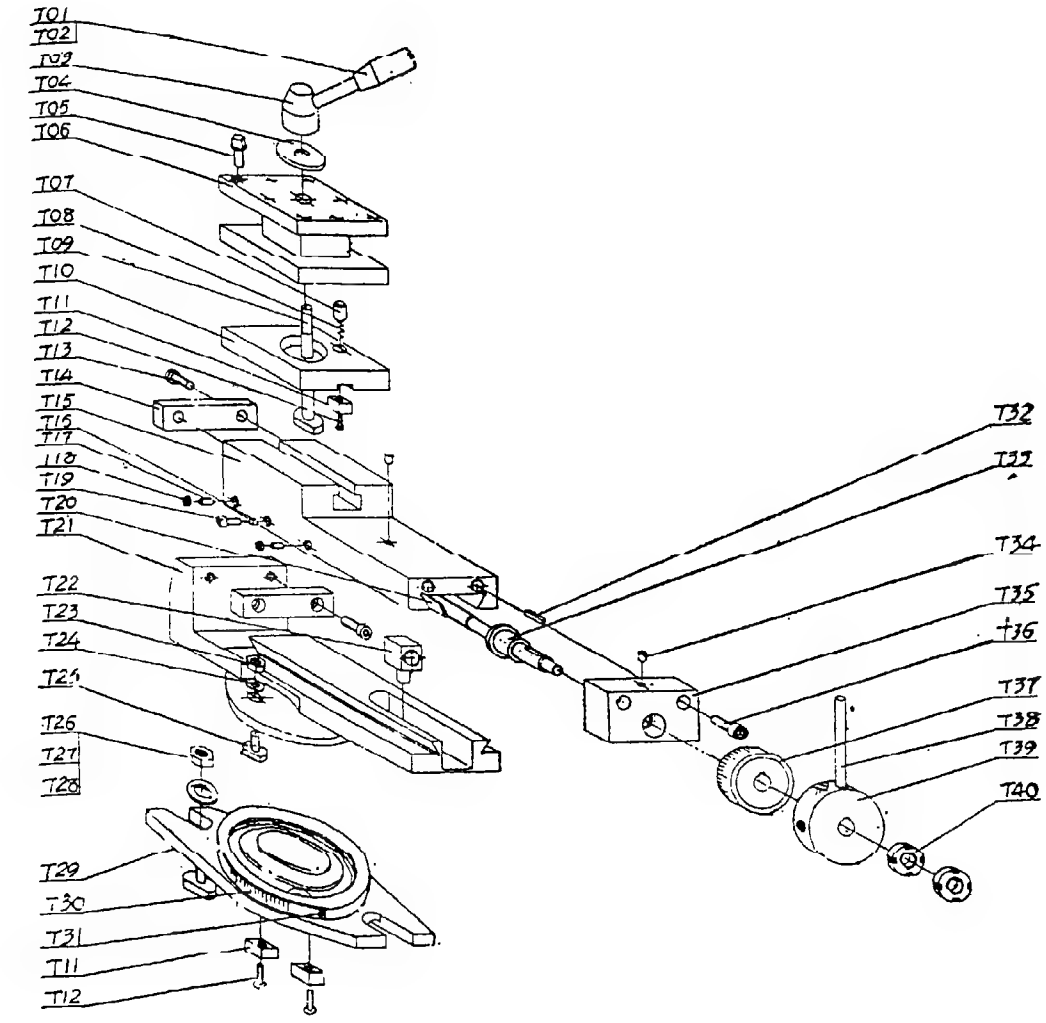
Part 1 Bed



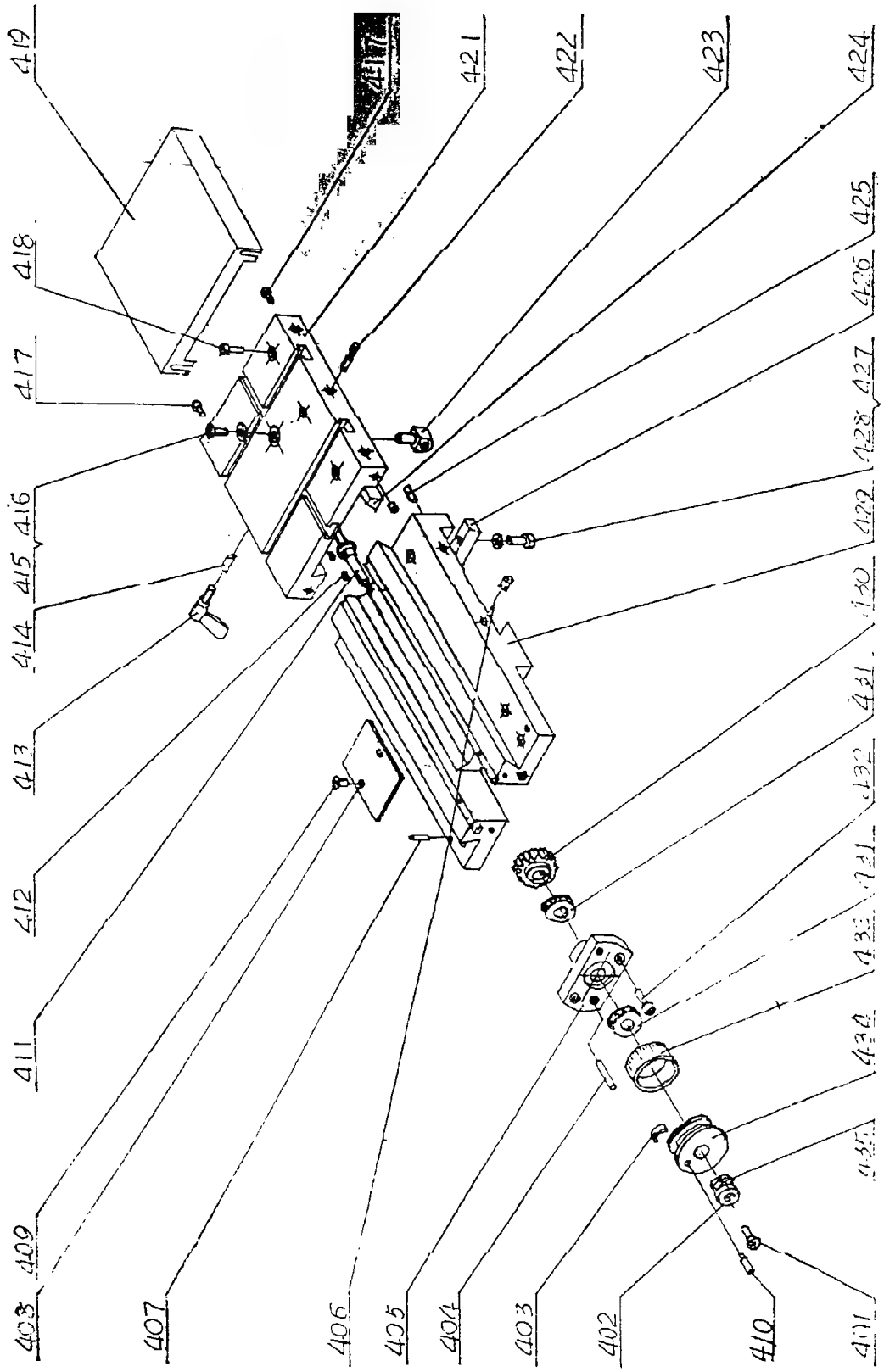
Part 2 Headstock



Part 3. Drilling-milling Box



Part 4 Tool Post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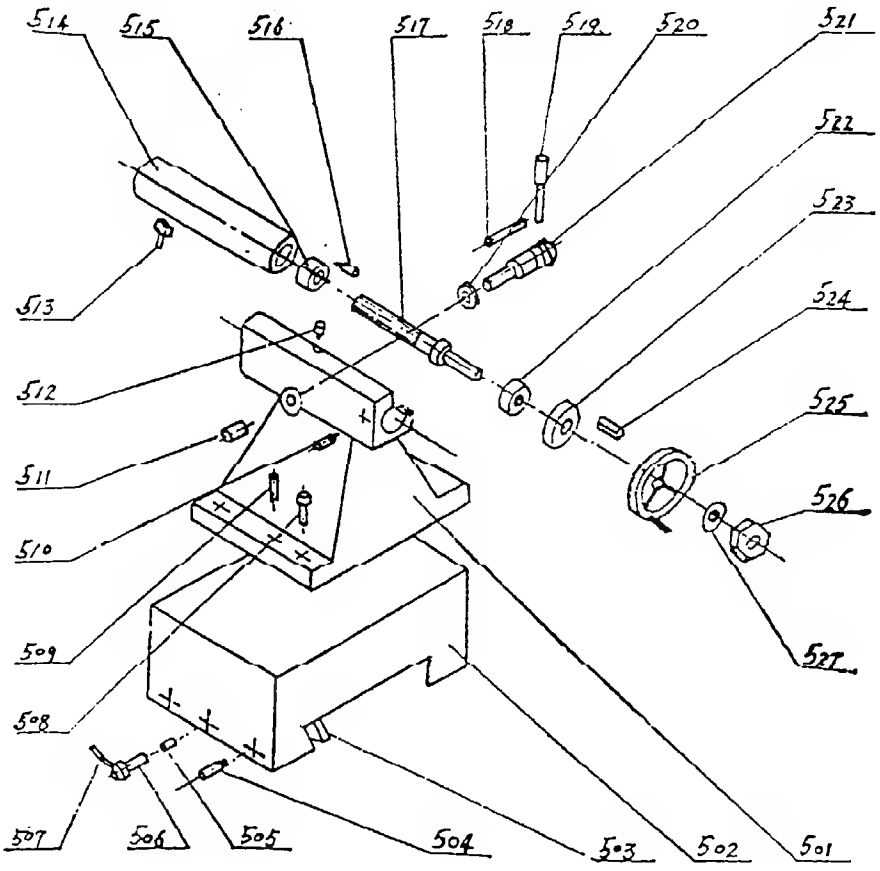
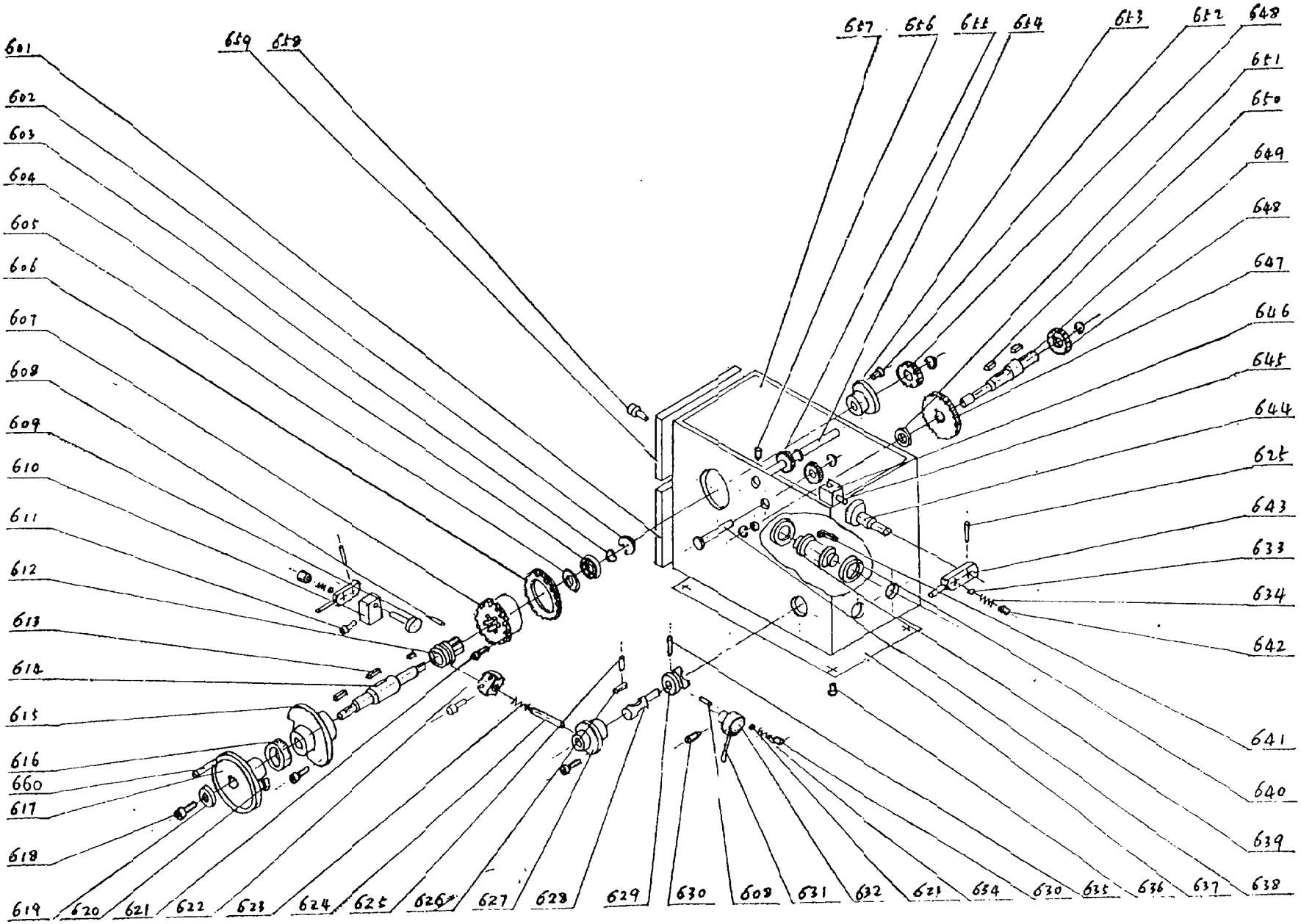
Part 5 Table



Part 6 Tail Stock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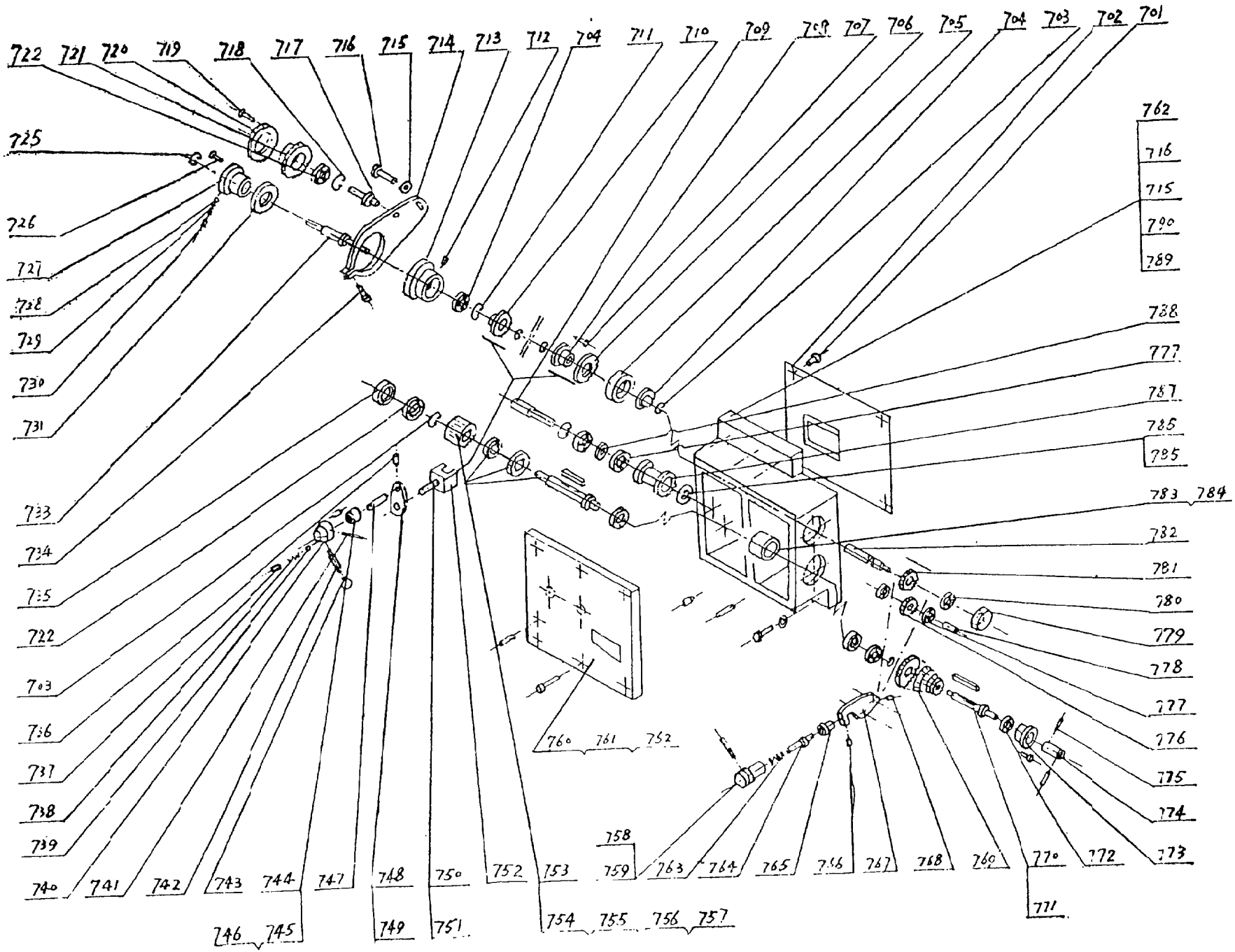
Part 7 Apron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Parts List

ITEM	NAME & SPEC.	QUAN.
	Part I Bed	
101	socket cap screw M6×16	7
102	gib	1
103	socket cap screw M6×30	2
104	taper bolt 4×40	2
105	rack	1
106	internal cover	1
107	cover	1
108	motor frame	1
110	flat washer 10	2
111	hexagon bolt M10×40	2
112	middle Pulley wheel	1
113	circlip 32	1
114	circlip for shaft 15	1
115	V-belt A-560	1
116	motor pulley	1
117	flat key	1
118	bearing 102	2
119	hexagon bolt M8×20	4
120	spring washer 8	4
121	motor 550w 1400r/min	1
122	spacer ring	1
123	support shaft	1
124	support plate	1
125	pin bolt	1
126	splint pin 2.5×16	1
127	bed	1
128	lead screw support	1
129	taper bolt 4×20	2
130	round nut M12×1.25	2
131	flat washer 12	1
132	bearing 8102	2
133	conical pointed tightening screw M6×10	1
134	spacer ring	1
135	lead screw	1
136	slotted cylindrical head screw M5×12	6
	Part II Headstock	
201	headstock housing	1
202	hexagon bolt M12×45	4

ITEM	NAME & SPEC.	QUAN.	ITEM	NAME & SPEC.	QUAN.
203	spring washer 12	4	225	V-belt A-710	1
204	internal screw taper pin 8×40	2	226	flat key 10×45	1
			227	gear I	1
205	switch cover	1	228	clinch 4×22	3
206	slotted panhead screw M5×12	4	229	gear connection sleeve	1
207	combined switch HZ10-10P/4	1	230	dust ring	1
208	lock bolt	1	231	washer	1
209	handle lever BM8×65	1	232	bearing E207	1
210	handle cannula BM8×40	1	233	socket cap screw M5×10	1
211	adjustable gear shaft	1	234		
212	countersink screw M4×14	5	235	reducer D97-4-16	1
213	gear II	1	236	spindle	1
214	bearing 100	2	237	bearing E7208	1
215	clinch 3×22	6	238	end cover	1
216	double-conjunction gear	1	239	socket cap screw M6×16	3
217	circlip 26	4		Part II Drilling-Milling Box	
218	circlip for shaft 10	2	301	flat washer 10	4
219	adjustable gear shaft	1	302	adjuster	1
220	gear	1	303	hexagon bolt M5×25	3
222	countersink screw M5×8	1	304	adjusting plate for supporting motor	1
223	slotted round nut M33×1.5	1			
224	spindle pulley	1	305	hexagon bolt M10×35	3

ITEM	NAME & SPEC.	QUAN.	ITEM	NAME & SPEC.	QUAN.
306	long cylindrical head tightening screw M6×16	1	328	spring base	1
			329	panhead screw M5×8	1
307	lower cover	1	330	spring-box cover	1
308	upper cover	1	331	pan-shaped spring	1
310	V-belt 0 710	1	332	conical pointed tightening screw M10×30	1
311	handle	1			
312	cross recess panhead screw M6×15	1	333	hexagon nut M10	3
			334	clamping rod	1
313	round nut M30×1.5	1	335	clamp lever	1
314	slotted panhead screw M5×8	10	337	conical pointed dog screw M10×40	1
315	big pulley	1	338	taper bolt 3×20	2
316	spline housing	1	339	fitting lever	1
317	circlip 62	2	340	hand wheel 8×63	1
318	bearing 206	2	341	shaft sleeve	2
319	bearing spacer ring	1	342	worm	1
320	countersink screw M5×8	1	343	single-row tapered roller bearing E7207	1
321	slotted round nut M24×1.5	1			
322	bearing 205	1	344	dust ring	1
323	spindle sliding bush	1	345	rubber washer	1
324	spindle	1	346	shaft for drilling & milling	1
325	flat key 8×25	2	347	conical pointed tightening screw M6×10	1
326	cylindrical gear	1			
327	circlip for shaft 25	1	348	worm-gear case	1

ITEM	NAME & SPEC.	QUAN.	ITEM	NAME & SPEC.	QUAN.
349	oil cup 6	1	371	cross recess panhead screw M4×10	2
350	socket cap screw M6×16	3			
351	slotted flat-end tightening screw M4×6	1	372	drilling & milling box	1
			373	motor 370W 1400r/min	1
352	washer	1	309	cross linking 40	2
353	worm	1		Part Ⅳ Table	
354	scale ring	1	401	screw M5×12	1
355	plate spring	1	402	washer	1
356	handle body	1	403	plate spring	1
357	handle lever	3	404	taper bolt 4×24	2
358	long handle cannula BM10×50	3	405	suppert	1
359	circlip for shaft 32	1	406	oil cup 6	4
360	banking pin	1	407	taper bolt 3×20	2
362	steel ball 6	1	408	lower board	1
363	spring	1	409	screw M4×8	2
364	round handle BM10×40	1	410	handle M6×32	1
365	banking shaft	1	411	lead scrw	1
366	connecting swivel plate	1	412	flat key 4×10	2
367	taper bolt 6×40	1	413	lock bolt	1 set
368	socket cap screw M6×20	6	414	sloping block	1
369	cover sheet	1	415	screw M5×12	1
370	push button KAO-5	1	416	washer	1

ITEM	NAME & SPEC.	QUAN.
417	screw M5×8	2
418	socket cap screw M8×25	3
419	cover	1
421	table	1
422	screw M8×20	3
423	nut	1
424	gib	1
425	screw M10×15	3
426	gib	1
427	hexagon bolt M10×40	2
428	washer 10	2
429	lower slide plate	1
430	gear Z18	1
431	bearing 8102	2
432	socket cap screw M6×16	2
433	scale ring	1
434	hand wheel	1
435	rount nut M12×1.25	1

Part Ⅳ Tool Post

ITEM	NAME & SPEC.	QUAN.
T01	handle lever BM8×75	1
T02	handle sleeve BM8×40	1
T03	handle locking holder	1
T04	washer	1
T05	square pressing screw M8×22	8
T06	tool apron	1
T07	positioning cap	1
T08	spring	1
T09	locking shaft	1
T10	tool apron backer	1
T11	positioning block	3
T12	cross recess head countersink screw M4×10	3
T13	socket cap screw M5×10	4
T14	clamping block	2
T15	movable clamp	1
T16	sloping block	1
T17	conical pointed tightening screw M5×15	2
T18	nut M5	2
T19	socket cap screw M5×16	1
T20	spacer block	1
T21	fixed clamp	1
T22	nut	1
T23	nut M8	2

ITEM	NAME & SPEC.	QUAN.
T24	flat washer 8	2
T25	T-shaped screw bolt M8×26	2
T26	nut M10	2
T27	flat washer 10	2
T28	T-shaped screw bolt M10×26	2
T29	basement	1
T30	graduated staff guage	1
T31	hollow rivet	2
T32	flat key 4×20	1
T33	lead screw	1
T34	oil cup 6	2
T35	lead screw base	1
T36	socket cap screw M6×16	2
T37	scale ring	1
T38	handle lever	1
T39	hand wheel	1
T40	round nut	2
	Part V Tail Stock	
501	tail stock	1
502	tail stock seating	1
503	spacer block	1
504	conical pointed tightening screw M6×30	2
505	sloping block	1
506	clamp shaft	1
507	handle	1
508	socket cap screw M6×16	4
509	taper bolt 4×25	2
510	conical pointed tightening screw M6×10	1
511	clamp block	1
512	oil cup 6	2
513	T-shaped emboly flat key	1
514	tail stock core shaft	1
515	nut	1
516	flat end tightening screw M4×8	3
517	tail stock lead screw	1
518	cylinder pin 5×20	1
519	handle lever BM8×65	1 set
520	washer	1
521	check lock shaft	1
522	supporting sleeve	1
523	graduated disk	1
524	flat key 4×20	1
525	tail stock hand wheel B12×100	1

ITEM	NAME & SPEC.	QUAN.
526	capped nut M10	1
527	flat washer 10	1
	Part Apron	
601	bearing cover	1
602	circlip 35	1
603	circlip for shaft 17	1
604	bearing 103	2
605	washer	1
606	helical gear Z60	1
607	gear with splin hole	1
608	pin 4×18	2
609	longitudinal occentric shaft	1
610	holder	1
611	socket cap screw M5×30	4
612	connection	1
613	flate key 4×20	2
614	shaft	1
615	flange	1
616	scale ring	1
617	handwheel	1
618	socket cap screw M0×20	1
619	washer	1

ITEM	NAME & SPEC.	QUNA.
620	plate spring	1
621	socket cap screw M6×30	3
622	lock body	1
623	spring	1
624	lock shaft	1
625	taper pin 3×15	1
626	flate key 6×12	1
627	guide bush	1
628	guide shaft	1
629	half nut	1
630	screw M6×10	2
631	handle	1
632	handle holder	1
633	steel ball 5	1
634	spring	1
635	taper pin 3×30	1
636	screw M5×8	4
637	bottom board	1
638	shaft	1
639	worm	1
640	bearing 46105	2
641	clasp key	1

ITEM	NAME & SPEC.	QUAN.
642	empty-centre screw	2
643	lever	2
644	transverse eccentric shaft	1
645	shaft	1
646	fork block	1
647	gear Z65	1
648	gear Z17	2
649	shaft	1
650	flate key 4×10	4
651	washer	1
652	screw M5×12	3
653	shaft sleeve	1
654	mid gear shaft	1
655	gear Z18	2
656	screw M6×6	1
657	apron housing	1
658	screw M6×12	6
659	cover	1
660	handle	1
	Part Ⅵ Feed Box	
701	screw M5×8	4
702	board	1
703	circlip for shaft 12	5
704	bearing . 101	3
705	shaft sleeve Ⅱ	1
706	gear Z36	1
707	screw M4×12	3
708	gear Z27	1
709	shaft Ⅳ	1
710	gear	1
711	circlip 28	1
712	conical pointed tightening screw M6×10	8
713	bearing cover	1
714	adjustable gear support	1
715	flat washer 8	5
716	hexagon bolt M8×25	5
717	adjustable gear shaft	1
718	circlip 26	2
719	clinch 3×12	9
720	double-conjunction gear Z56	1
721	double conjunction gear Z33	1
722	gear 100	4

ITEM	NAME & SPEC.	QUAN.	ITEM	NAME & SPEC.	QUAN.
		1	746	flat-end tinghtening screw M4×8	2
725	circlip for shaft 12	1	747	handle shaft	2
726	clinch 4×22	3	748	fork I	1
727	cluth sleeve	1	749	fork II	1
728	steel ball 6	3	750	shaft	1
729	spring	3	751	shaft	1
730	flat-end tightening screw	3	752	fork block	2
731	laminated fabric gear Z49	1	753	gear II Z27	1
		1	754	spacer ring	1
733	shaft I	1	755	gear I Z18	1
734	socket cap screw M5×15	4	756	shaft II	1
735	sleeve	1	757	flat key 4×36	1
736	taper pin 3×20	2	758	taper pin 2×18	1
737	flat-end tightening screw M6×10	2	759	handle cannula	1
738	spring	2	760	cover	1
739	steel ball	2	761	socket cap screw M6×12	6
740	handle holder	1	762	taper pin 5×25	4
741	taper pin 3×40	2	763	spring	1
742	handle lever	2	764	stop bolt	1
743	handle ball	2	765	stop-bolt body	1
744	sleeve	1	766	conical pointed tightening screw M5×8	1
745	little sleeve	1			

ITEM	NAME & SPEC.	QUAN.	ITEM	NAME & SPEC.	QUAN.
767	speed-change handle	1	787	double-connection gear	1
768	conical pointed tightening screw M4× 8	2	788	spacer ring	1
			789	feed housing	1
769	tower gear Z14.16.18.20.22.24	1	790	flat-end tightening screw	4
770	shaft V	1			
771	flate key 4× 46	1			
772	bearing 102	1			
773	gear cover	1			
774	connection sleeve	1			
775	taper pin	2			
776	mid-gear	1			
777	bearing 1000096	4			
778	pin B6× 24	1			
779	sleeve	1			
780	bearing 18	1			
781	sliding gear Z22	1			
782	shaft II	1			
783	bearing sleeve	1			
784	bearing spacer sleeve	1			
785	circlip 15	2			
786	circlip for shaft 6	1			

TEST CERTIFICATION

LINYI MACHINE TOOL WORKS

THE PEOPLE'S REPUBLIC OF CHINA

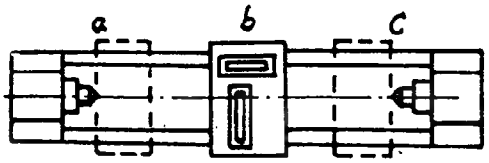
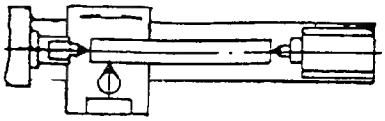
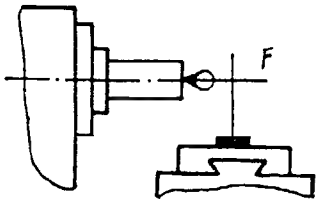
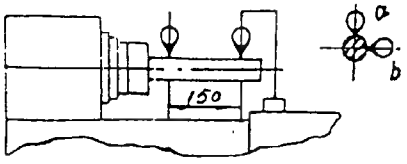
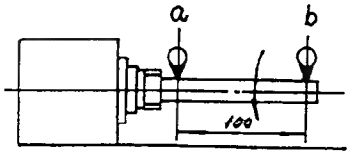
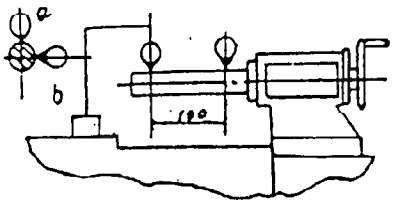
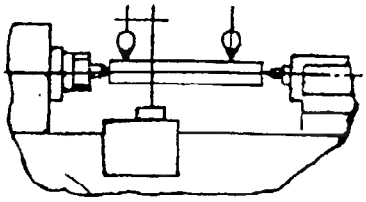
This machine conforms with Q/LJC01—94 «Light Duty Versatile Lathe Accurary» Standard. It has been tested and found qualified for delivery.

Chief of Inspection Dept: WANG HEN TIAN

Plant Director: YU DANING

L—H009	Test Certification	Page 1 of 2

Inspection Accuary Table (mm)

No.	Item	Inspecting Sketch	Allowable Tolerance
G_0	Leveling for the machine		0.08/1000
G_1	Linearity of carriage moving in the levle		0.08
G_2	Axial float of the spindle		0.03
G_3	Parrallelism of the turning spindle axis to the carriage moving		a:0.04 b:0.05 Only onward deviation allowed
G_4	Runout of the axis of spindle taper hole of the headstock		a:0.03 Near the spindle end b:0.04 100mm away from the end
G_5	Parrallelism of the axis of tailstock sleeve to the carriage moving		a:0.04 b:0.04
G_6	Equal-heightof the axis between the headstock and tailstock centres to the carriage		0.05

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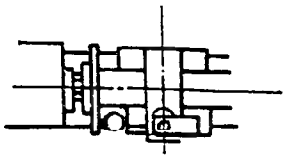
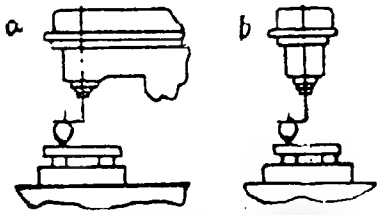
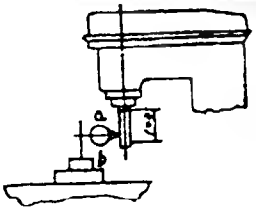
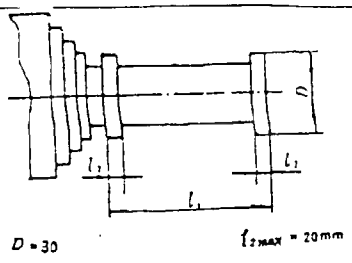
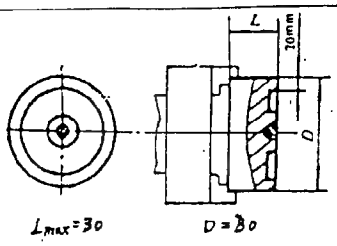
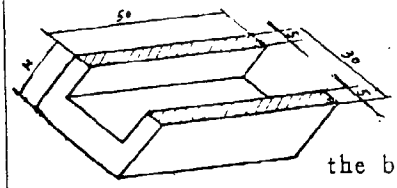
Inspection Accuary Table (mm)

No.	Item	Inspeeting Sketch	Allowable Tolerance
G_7	Perpendicular-ity of lateral moving of the transverse tool post to the spindle axis		0.07／100
G_8	Perpendicalar-ity of the rotation axis of the drilling -milling spindle to the table face		a:0.15／200 b:0.15／200
G_9	Runout of the axis of the drilling-milling spindle hole		a:0.03 Near the spindle end b:0.05 100mm away from the end
P_1	Cylindricity of excircle finishing		0.05 Measured on a length of 50mm
P_2	Flatness of face fine cutting		0.08
P_3	Parrallelism of the milled surface to the base face	 the base face	0.08

L—H009	Packing List	Page 1 of 1

Case No.

Gross weight 260kg Net weight 180kg

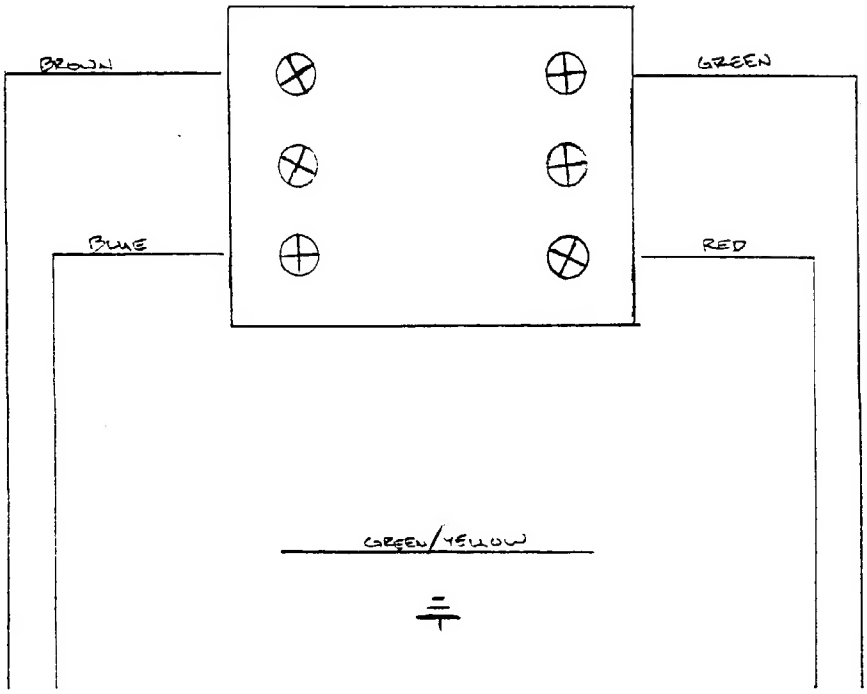
Size of box (L×w×h) 115cm×74.5cm× 96cm

No.	Name	Specification and Mark	Quantity	Remark
1	The Main machine tool	L-H009	1	
2	Three-jaw chuck	Ø100	1	
3	Flange		1	
4	Pressing cutter wrench		1	
5	Wedge		1	
6	Drill chuck	JS16	1	
7	Drawing bar		1	
8	Excircle turning tool		1	
9	Drill taper stock		1	
10	Fixed centre	No.2,No.3	1 for each	Morse taper
11	Facer	Ø63	1	
12	Borer		1	Special order
13	Milling chuck		1	Special order
14	Thread cutting		1	Special order
15	Pressure oiler	180cm³	1	Special order
16	Technical document		1	

Packing Inspecter Inspector 12 Date

SKU# 5981 DESC. MULTI-PURPOSE MACHINE

ON/OFF SWITCH

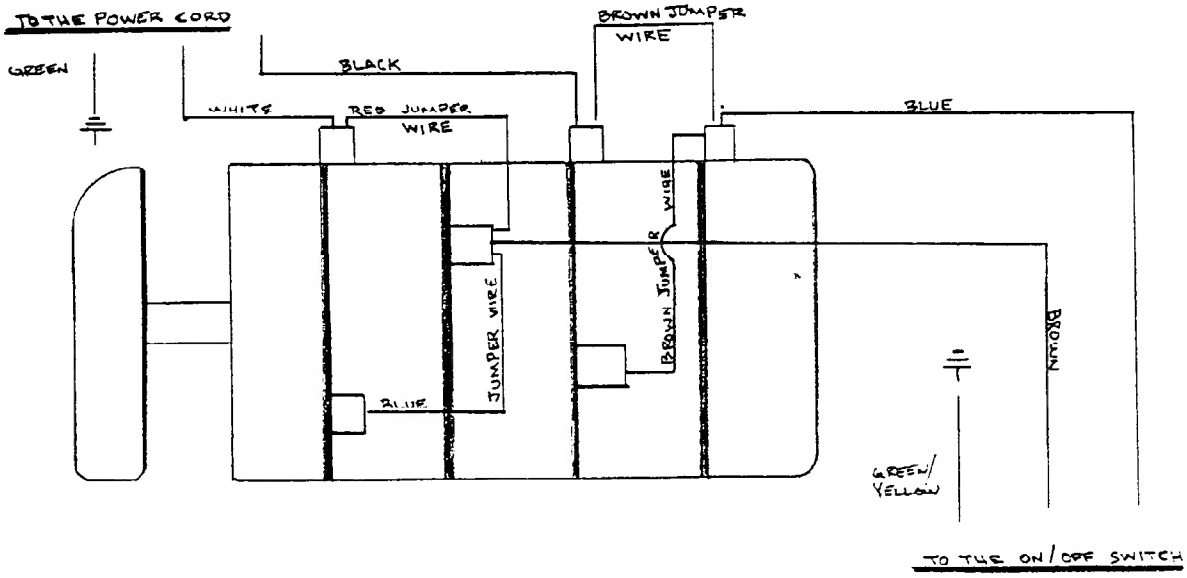


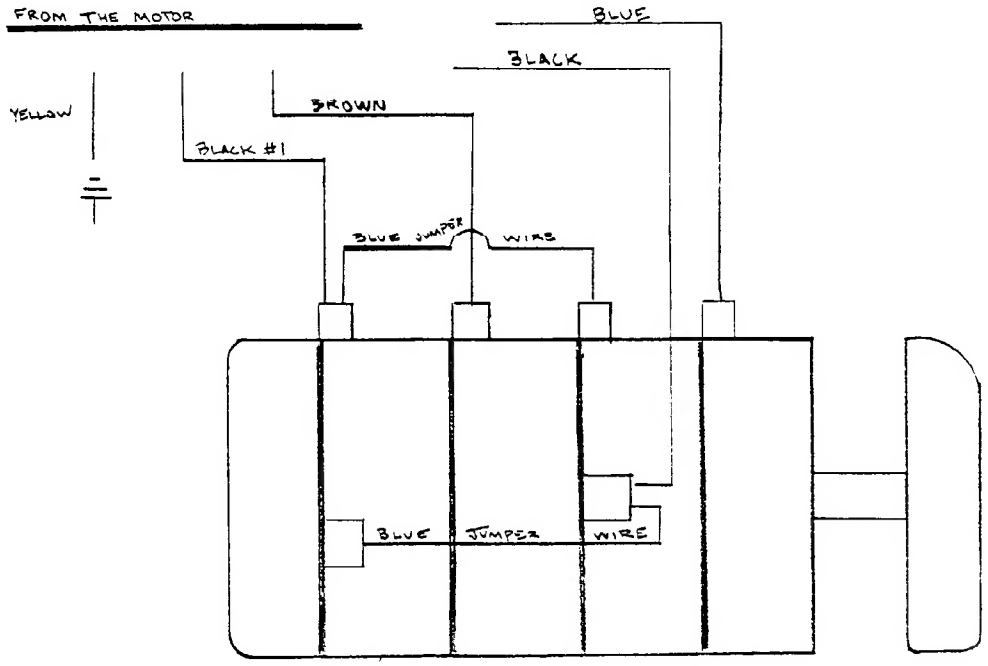
TO THE REVERSE SWITCH

TO THE UPPER HEAD MOTOR

SKU#5981 DESC. MULTI-PURPOSE MACHINE

REVERSE SWITCH

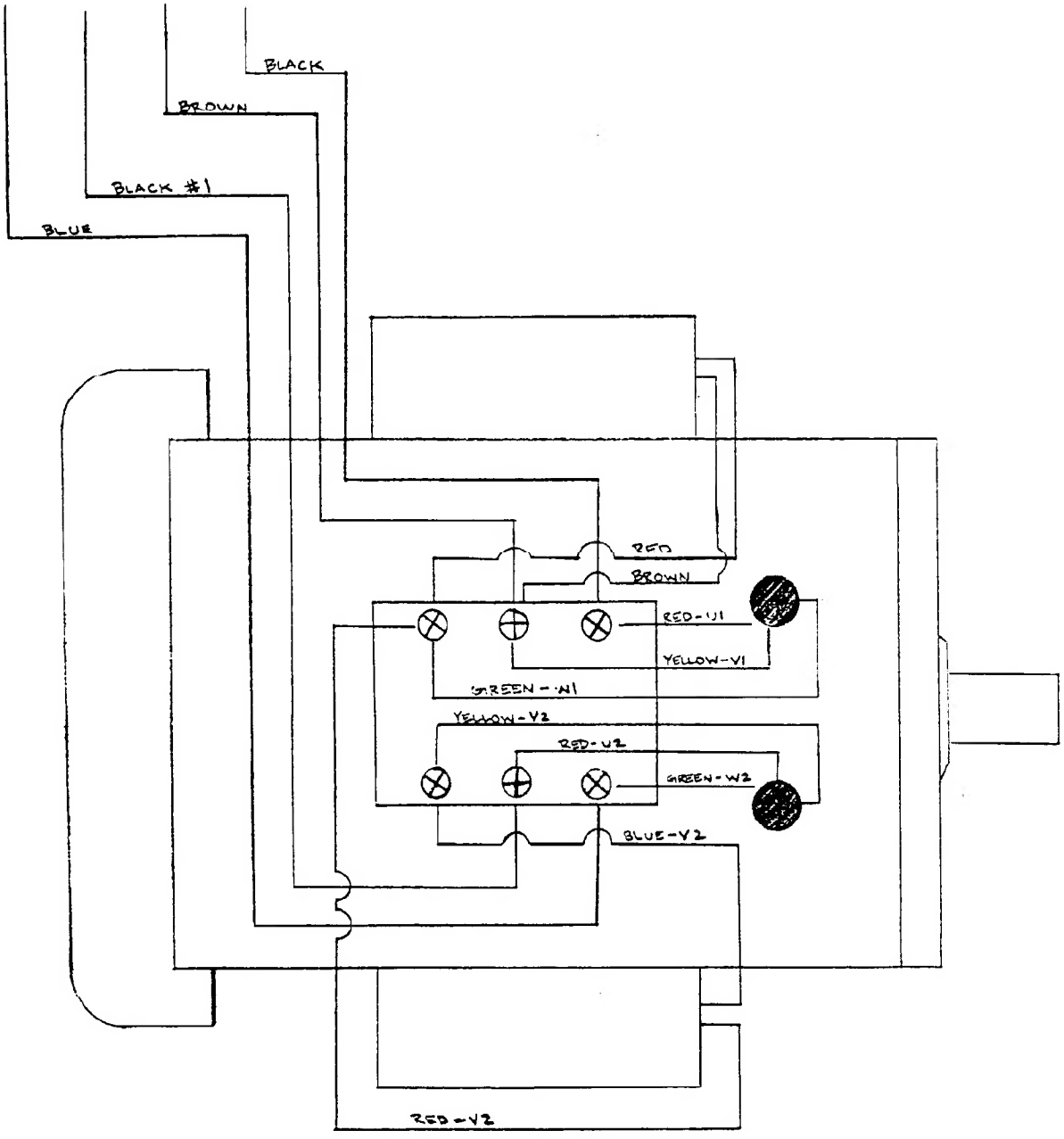




SKU# 5981 DESC. MULTI-PURPOSE MACHINE

MOTOR

TO THE REVERSE SWITCH



A. LEAD SCREW DIRECTIONAL SELECTOR (FORWARD / REVERSE)

B. HIGH/NEUTRAL/LOW LEAD SCREW SPEED

C. FEED RATE SELECTOR

D. CROSS FEED LOCK/RELEASE LEVER

E. POWER FEED ENGAGE/DISENGAGE,
WHEN LEAD SCREW IS TURNING, THIS ENGAGES THE POWER FEED